

## AMENDMENTS TO THE CLAIMS

This listing of claims will replace all prior versions, and listings, of claims in the application.

### Listing of Claims:

1. (Currently Amended) Implant An implant for compensating for pathological changes in the spinal column or locomotor system, the implant comprising a surface and a body having a varnish-like biodegradable polymer coating of a thickness of 100  $\mu\text{m}$  or less and made of a biodegradable polymer, wherein

the body has a substantially constant physiochemical state under physiological conditions in-vivo, in vivo;

the varnish-like biodegradable polymer coating forms an adhesive bond to the surface of the implant; and

the biodegradable polymer has a mean molecular weight of 100 kDa or less, and wherein said implant is made by:

- a. preparing a dispersion of the biodegradable polymer in an organic solvent;
- b. applying the dispersion on the surface of the implant; and
- c. evaporating the organic solvent.

2. (Currently Amended) Implant The implant of claim 1, wherein the implant is a fracture-fixation or endoprosthetic device.

3. (Currently Amended) Implant The implant of claim 2, wherein the fracture-fixation device is selected from the group consisting of a plate, screw, nail, pin, wire, thread, and cage.

4. (Currently Amended) Implant The implant of claim 1, wherein the varnish-like coating has a thickness of 50  $\mu\text{m}$  or less.

5. (Currently Amended) Implant The implant of claim 4, wherein the varnish-like coating has a thickness of 10 to 30  $\mu\text{m}$ .

6. (Currently Amended) Implant The implant of claim 1, wherein the biodegradable polymer has a glass transition temperature of more than 37°C (98.6°F).

7. (Cancelled)

8. (Currently Amended) ~~Implant~~ The implant of claim 1, wherein the biodegradable polymer is selected from the group consisting of poly- $\alpha$  hydroxy acids, polyglycols, polytyrosine carbonates, starch, gelatins, cellulose, and blends and interpolymers thereof.

9. (Currently Amended) ~~Implant~~ The implant of claim 8, wherein the poly- $\alpha$  hydroxy acid biodegradable polymer ~~includes poly- $\alpha$  hydroxy acids that are~~ is selected from the group consisting of polylactides, polyglycol acids, and interpolymers thereof.

10. (Currently Amended) ~~Implant~~ The implant of claim 1, wherein the varnish-like coating contains a pharmaceutically active additive.

11. (Currently Amended) ~~Implant~~ The implant of claim 10, wherein the pharmaceutically active additive includes an osteoinductive substance.

12. (Currently Amended) ~~Implant~~ The implant of claim 11, wherein the osteoinductive substance contains a growth factor.

13. (Currently Amended) ~~Implant~~ The implant of claim 12, wherein ~~a~~ the ~~growth factor~~ growth factor is present in an amount from ~~percentage of a total weight of the coating is~~ 0.1 to 10% 10 by weight percentage of the coating.

14. (Currently Amended) ~~Implant~~ The implant of claim 13, wherein ~~the growth factor percentage of the total weight is~~ growth factor is present in an amount from 0.5 to 8% 8 by weight percentage of the coating.

15. (Currently Amended) ~~Implant~~ The implant of claim 14, wherein ~~the growth factor percentage of the total weight is~~ growth factor is present in an amount from 1 to 5% 5 by weight percentage of the coating.

16. (Currently Amended) ~~Implant~~ The implant of claim 12, wherein the growth factor includes at least one of IGF, TGF, FGF, EGF, BMP, and PDGF.

17. (Currently Amended) ~~Implant~~ The implant of claim 12, wherein the growth factor is IGF-I or TGF- $\beta$ .

18. (Currently Amended) ~~Implant~~ The implant of claim 12, wherein the growth factor is a mixture of IGF-I and TGF-  $\beta$ .

19. (Currently Amended) ~~Implant~~ The implant of claim 18, wherein the coating contains about 5% by weight of IGF-I and 1% by weight of ~~TGF- $\beta$ -1~~ TGF- $\beta$ .

20. (Currently Amended) ~~Implant~~ The implant of claim 1, wherein the coating contains at least two layers of the biodegradable polymer.

21. (Currently Amended) ~~Method~~ A method for making ~~the~~ an implant ~~of claim 1 for compensating for pathological changes in the spinal column or locomotor system, the implant comprising a surface and a body having a varnish-like coating of a thickness of 100  $\mu\text{m}$  or less and made of a biodegradable polymer, wherein~~  
the body has a substantially constant physiochemical state under physiological conditions *in vivo*;  
the varnish-like coating forms an adhesive bond to the surface of the implant; and  
the biodegradable polymer has a mean molecular weight of 100 kDa or less,  
and the method comprising the steps of:

- Preparing ~~preparing~~ a dispersion of the biodegradable polymer in an organic solvent;
- Applying ~~applying~~ the dispersion on ~~a~~ the surface of the implant ~~to be coated~~; and
- Allowing ~~evaporating~~ the organic solvent ~~to evaporate~~.

22. (Currently Amended) ~~Method~~ The method of claim 21, wherein the ~~application and evaporation steps of applying and evaporating~~ occur at a temperature between 0 and 30°C (32 - 86°F ).

23. (Currently Amended) ~~Method~~ The method of claim 21, wherein the ~~evaporation of the solvent~~ the step of evaporating occurs in a gaseous atmosphere substantially saturated with a solvent vapor.

24. (Currently Amended) ~~Method~~ The method of claim 21, wherein ~~the application of the dispersion and the evaporation of the solvent~~ steps b and c are repeated at least two times.

25. (Currently Amended) ~~Method~~ The method of claim 21, wherein the dispersion is a colloidal solution of the biodegradable polymer in the solvent.

26. (Currently Amended) ~~Method~~ The method of claim 25, wherein the colloidal solution is produced by allowing a mixture of polymer and solvent to stand for 1 minute to 24 hours.

27. (Currently Amended) ~~Method~~ The method of claim 25, wherein the colloidal solution is filtered prior to its application.

28. (Currently Amended) ~~Method~~ The method of claim 27, wherein the colloidal solution is filtered through a micropore filter with a pore size of 0.45  $\mu\text{m}$  or smaller.

29. (Currently Amended) ~~Method~~ The method of claim 21, wherein ~~ethyl acetate or chloroform is used as the solvent is ethyl acetate or chloroform.~~

30. (Currently Amended) ~~Method~~ The method of claim 21, wherein the dispersion contains 20 to 300 mg of polymer per ml of solvent.

31. (Cancelled)

32. (Withdrawn) An orthopedic implant having a fixed contour for placement adjacent bone, the implant comprising:  
a metallic body defining a periphery, the periphery generally corresponding with the fixed contour of the implant; and  
an abrasion-resistant, biodegradable polymer deposition on the periphery,  
wherein the deposition has a thickness of 100  $\mu\text{m}$  or less, and at least a portion of the polymer deposition is adapted to contact bone when the implant is placed adjacent bone.

33. (Withdrawn) The implant of claim 32, wherein the deposition has a thickness of 50  $\mu\text{m}$  or less.

34. (Withdrawn) The implant of claim 33, wherein the deposition has a thickness of 10 to 30  $\mu\text{m}$ .

35. (Withdrawn) The implant of claim 34, wherein the polymer has a glass transition temperature of more than 37°C (98.6°F).

36. (Withdrawn) The implant of claim 32, wherein the polymer has a mean molecular weight of 100 kDa or less.

37. (Withdrawn) The implant of claim 32, wherein the polymer is selected from the group consisting of poly- $\alpha$  hydroxy acids, polyglycols, polytyrosine carbonates, starch, gelatins, cellulose, and blends and interpolymers thereof.

38. (Withdrawn) The implant of claim 37, wherein the polymer includes poly- $\alpha$  hydroxy acids that are selected from the group consisting of polylactides, polyglycol acids, and interpolymers thereof.

39. (Withdrawn) The implant of claim 32, wherein the polymer deposition comprises a substantially amorphous polymer structure.

40. (Withdrawn) The implant of claim 33, wherein the polymer deposition comprises pharmaceutically active agents.

41. (Withdrawn) The implant of claim 32, wherein the implant is a fracture fixation device.

42. (Withdrawn) The implant of claim 33, wherein the implant comprises a bone fastener.

43. (Withdrawn) The implant of claim 34, wherein the implant is a screw.

44. (Withdrawn) The implant of claim 34, wherein the implant is a pin.

45. (Withdrawn) The implant of claim 34, wherein the implant is a nail.

46. (Withdrawn) The implant of claim 34, wherein the implant is a wire.

47. (Withdrawn) The implant of claim 33, wherein the implant is a plate.

48. (Withdrawn) The implant of claim 33, wherein the implant is a cage.

49. (Withdrawn) The implant of claim 32, wherein the implant comprises an endoprosthetic device.

50. (Withdrawn) The implant of claim 49, wherein the implant is a substitute part for a joint.

51. (Withdrawn) The implant of claim 49, wherein the implant is a substitute for a bone section.

52. (Withdrawn) The implant of claim 49, wherein the implant is a substitute for a tooth.

53. (Withdrawn) The implant of claim 32, wherein the metallic component is steel.

54. (Withdrawn) The implant of claim 53, wherein the metallic component is stainless steel.

55. (Withdrawn) The implant of claim 32, wherein the metallic component is titanium.

56. (Withdrawn) The implant of claim 32, wherein metallic component comprises titanium and steel.

57. (Withdrawn) An orthopedic implant having a fixed contour for placement proximate to bone, the implant comprising:  
a body defining a periphery, the periphery generally corresponding with the fixed contour of the implant; and  
an abrasion-resistant, biodegradable polymer deposition on the body,  
wherein the deposition has a thickness of 100 µm or less, and at least a portion of the polymer deposition is adapted to contact bone when the implant is placed proximate to bone.

58. (Withdrawn) The implant of claim 57, wherein the periphery has substantially constant physiochemical state under physiological conditions in vivo.

59. (Withdrawn) An orthopedic implant for placement proximate to bone comprising:  
a member, and  
an abrasion-resistant, biodegradable polymer deposition on the member,  
wherein the deposition has a thickness of 100 µm or less and at least a portion of the polymer deposition comprises an osteoinductive substance adapted to promote osteosynthesis when the implant is placed proximate to bone.

60. (Currently Amended) An implant for compensating for pathological changes in the spinal column or locomotor system, the implant comprising a surface and a body having a

varnish-like ~~biodegradable polymer~~ coating of a thickness of 100 µm or less and made of a biodegradable polymer, wherein

the implant comprises a base material which is not ~~biodegradeable biodegradable~~; and the varnish-like ~~biodegradable polymer coating~~ forms an adhesive bond to the surface of the implant,

and wherein said implant is made by:

- a. preparing a dispersion of the biodegradable polymer in an organic solvent;
- b. applying the dispersion on the surface of the implant; and
- c. evaporating the organic solvent.

61. (Currently Amended) The implant of claim 60, ~~wherein said base material~~, wherein the base material is a metal or an alloy.

62. (Currently Amended) The implant of claim 61 ~~60~~, ~~wherein said base material~~, wherein said base material is stainless steel.

63. (Currently Amended) The implant of claim 61 ~~60~~, ~~wherein said base material~~, wherein said base material is titanium.

64. (New) An implant made by the method of claim 21.